

12. (Previously Added) A rotating table apparatus according to Claim 11 wherein said cam is a roller gear cam and said rotating table intermittently rotates.

β1 13. (Previously Added) A rotating table apparatus according to Claim 12 wherein a tool is provided in said rotating table.

14. (Previously Added) A rotating table apparatus according to Claim 12 wherein said rotating table is provided with a chuck for chucking a workpiece to be a processing object.

REMARKS

Claims 8-14 are now pending in the application. Minor amendments have been made to the claims to simply overcome the rejections of the claims. The amendments to the claims contained herein are at least of equivalent scope as originally filed and, thus, are not narrowing amendments. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 2-37156 in view of Ochiai et al.

In this regard, the Examiner has noted that JP 2-37156 teaches the claimed device wherein a "tool or the like" has a "rotating table" driven by a worm drive and cams. Ochiai et al is said to teach a gap for a static pressure bearing "invariably"

provided between movable parts in a “rotating table” that is filled with oil. Thus, according to the Examiner, possessing ordinary skill in the art would be expected to readily modify the teachings of JP 2-37156 with the “opposing surfaces” or gap of Ochiai et al to achieve the benefits of “precision finish machining” as set forth in column 1 of Ochiai et al. Lastly, the Examiner notes that the particular drive means used and the “space or gap dimension and other design variants, such as the positioning of a tool or work upon the table are not alleged by Applicant to be critical and comprise conventional uses well within the level of one having ordinary skill in the art.

The foregoing rejection is respectfully traversed.

CONCLUSION

Independent claim 8 as amended, now includes the feature that a gap portion in the housing is provided with oil for lubricating said cam and said cam followers, and that said space is linked with said gap portion, so that a portion of oil provided in said gap portion flows into said space.

Applicant respectfully submits that this feature is not disclosed in any documents cited by the Examiner.

According to the feature, a portion of oil for lubricating said cam and said cam followers which flows into the space linked with the gap portion is used as a damper for decreasing oscillation generated in the rotating table. Therefore, the oil provided in the housing can be used not as a lubricator but also as a damper. As a result, the rotating table apparatus is simplified.

In view of the amendment of claim 8 as presented, it is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: May 29, 2003

By: Robert M. Siminski
Robert M. Siminski
Reg. No. 36,007

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600